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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,814	10/01/2003	Ichiro Kamimura	67336-014	8795

7590 09/20/2005

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Washington, DC 20005-3096

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Tch

Office Action Summary	Application No. 10/674,814	Applicant(s) KAMIMURA ET AL.	
	Examiner Stephen Gravini	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by either Brown (US 5,361,511) or by Goldberg (US 4,603,489). Brown is considered to disclose the claimed invention comprising:

a refrigerant circuit constituted by sequentially installing and connecting a compressor **60**, a gas cooler **62** (wherein the disclosed condenser section is considered to anticipate the claimed gas cooler because to those skilled in the art a condenser is a device that converts a gaseous fluid into a liquid form by cooling), a pressure reducing device **64** (wherein the disclosed expansion valve is considered to anticipate the claimed pressure reducing device because to those skilled in the art an expansion valve is a device that restricts high pressure flow on one side of the device such that pressure is reduced on the other side of the device when the flow is expanded), and an evaporator **66** in an annular shape **30** (wherein the disclosed double wall housing is considered to anticipate the claimed annular shape because to those skilled in the art a double wall housing allows one wall to enclose another wall such that the wall within a wall forms an annular shape); and

blowing means **50, 52', 46, 49** for circulating air the drying chamber to exchange heat with the gas cooler and the evaporator wherein the blowing means is positioned in an air circulation path between the gas cooler and evaporator (please see column 3

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lines 5-15). The blowing means position is given its broadest reasonable interpretation in light of the specification and can be considered new matter since the original specification is silent on the blowing means position between the gas cooler and evaporator. For example, in paragraph [0017] of the present application publication, US 2004/0107595, the blowing means is between the inlet and outlet of the air circulation path, but no mention is discussed regarding the position between the cooler and evaporator. In another example, paragraph [0006] of the publication states that the blowing means is for circulating air in a drying chamber to exchange heat with a gas cooler and evaporator, but is silent with respect to the claimed position. A final example shows that paragraph [0085] recites a sequential installation but not a blowing means between a gas cooler and evaporator. Since the new matter regarding blower position introduced in the amended claimed invention can be broadly and reasonably construed to be in the air circulation path to exchange heat with a cooler and evaporator in sequential installation, first primary reference Brown is considered to anticipate the claimed invention; alternatively Goldberg is considered to clearly anticipate the claimed invention, but will be further explained how the reference is a prima facie showing of anticipation. Goldberg is considered to disclose the claimed invention comprising:

a refrigerant circuit constituted by sequentially installing and connecting a compressor **26**, a gas cooler **25** (please see the discussion under the Brown anticipation regarding how the claimed gas cooler is anticipated by the disclosed condenser), a pressure reducing device **27** (please see the discussion under the Brown anticipation regarding how the claimed pressure reducing device is anticipated by the

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disclosed expansion valve), and an evaporator 17 in an annular shape (wherein an annular shape is broadly and reasonable construed to be a shape where one path is within an another path which can be clearly seen from the face of the Goldberg reference figure); and

blowing means 10, 11, 12, 13, 14A, 14B, or 15 for circulating air the drying chamber to exchange heat with the gas cooler and the evaporator wherein the blowing means is positioned in an air circulation path between the gas cooler and evaporator (wherein any one of the disclosed blowing means is in an air circulation path between the gas cooler and evaporator). The blowing means position is given its broadest reasonable interpretation in light of the specification and can be considered new matter since the original specification is silent on the blowing means position between the gas cooler and evaporator. For example, in paragraph [0017] of the present application publication, US 2004/0107595, the blowing means is between the inlet and outlet of the air circulation path, but no mention is discussed regarding the position between the cooler and evaporator. In another example, paragraph [0006] of the publication states that the blowing means is for circulating air in a drying chamber to exchange heat with a gas cooler and evaporator, but is silent with respect to the claimed position. A final example shows that paragraph [0085] recites a sequential installation but not a blowing means between a gas cooler and evaporator. Since the new matter regarding blower position introduced in the amended claimed invention can be broadly and reasonably construed to be in the air circulation path to exchange heat with a cooler and evaporator

in sequential installation, second primary reference Goldberg is considered to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown or Goldberg in view of Ebara (EP 1 081 383). Brown or Goldberg is considered to disclose the claimed invention, as discussed in the anticipatory rejection above, except for the claimed CO₂ refrigerant and flexible duct member. Ebara, another evaporation, blower, and cooler device, is considered to disclose the claimed CO₂ refrigerant and the flexible duct member at column 1 line 9 and paragraph 4 respectively. It would have been obvious to one skilled in the art to combine the teachings of either primary reference Brown or Goldberg with the claimed CO₂ refrigerant and the flexible duct member found in the secondary reference Ebara for the purpose of allowing an environmentally safe refrigerant for domestic or commercial use and allowing ductile gas flow conduits adaptable for domestic or commercial use respectively.

Response to Arguments

anticipation

Applicants raised concern that the rejection did not address each and every feature of the claimed invention. The rejection has been more fully amplified to address applicants' concern. Since the newly amended claimed blowing means position has no basis in the specification it is treated as new matter. Under current Office practice, the blowing means position is broadly and reasonably construed from the specification to be

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in a sequential installation such that it is between an inlet and outlet air circulation path for circulating air in a drying chamber to exchange heat with a gas cooler and evaporator. Brown is considered to anticipate this blowing means position and Goldberg is considered to clearly anticipate this position. Applicants structural difference asserted does not overcome either anticipatory rejection. The rejection is considered proper and therefore maintained.

obviousness

Applicants correctly identified a typographical error in the prior Office action, which as been corrected, and have recognized that Brown or Goldberg were intended to be the primary references used in the obviousness rejection based on the supporting arguments. Applicants assert that because Brown or Goldberg does not anticipate the claimed invention, then an obviousness rejection can not be made using either of those primary references. However, the anticipatory rejection is considered proper and therefore the obviousness rejection is also considered proper and therefore maintained.

Applicants argue the claimed CO2 refrigerant overcomes the obviousness rejection for reasons "not even on the radar screens of the applied references." Applicants claim a CO2 refrigerant in a refrigerant circuit. Secondary reference Ebara uses CO2 refrigerant in a refrigerant circuit. The reasons argued by the applicants can be applied to the secondary reference because the objective for using CO2 refrigerant is to minimize vibration and noise for increased durability which is a direct result of applicants argued reasons. It appears that the obviousness rejection is considered proper and therefore maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

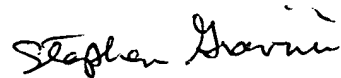
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on 571 272 4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMG
September 15, 2005

A handwritten signature in black ink, appearing to read "Stephen G. Harn". The signature is written in a cursive, flowing style.